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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,547	11/12/2003	Linda S. Powers	13368.0001 (DIV. I)	6904

7590 05/13/2005

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EXAMINER	
YU, MELANIE J	

ART UNIT	PAPER NUMBER
1641	

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/706,547	Applicant(s) POWERS ET AL.	
	Examiner Melanie Yu	Art Unit 1641	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 April 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *21-23,26 and 53*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

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Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments fail to overcome the rejections of claims 21-23, 26 and 53. Applicant argues that although Powers et al. and the instant application use identical chemistries as illustrative examples of how to tether ligands to substrate surfaces by means of organic coupling agents. Applicant further argues that the instant application and Powers et al. teach different tethers. However, as described on pages 4 and 5 of the office action dated 23 December 2004, since the tethers are identical between Powers et al. and the instant application, and the instant application teaches that the tethers are photostable, the tethers taught by Powers et al. are therefore photostable. The technique by which the ligand is tethered to the surface is not relevant to the tether length or photostable properties.

Applicant argues that Powers et al. do not specifically teach a linker having a length of at least 6 Angstroms, and a notable difference in tether length exists between the tethers taught in Powers et al. and the instant application. However, as stated above, the tethers for proteinaceous toxins in Powers et al. and the instant application, are identical and therefore meet the recited at least 6 Angstroms, and do not need to specifically recite the length of the tether.

Applicant argues that the removal of weak binding components of the solution from the HPMP layer in Hudson et al. is not for the removal of non-binding components of a solution from the surface. However, Hudson et al. is relied upon for washing and removal of components, and not for an HPMP matrix. Furthermore, the excess components of Hudson et al. are non-binding, and are removed from the HPMP matrix as well as the surface. Applicant further argues that Hudson et al. teaches away from surface-tethered peptide ligands, and that washing would have a negative impact on the strength of signal arising from analyte-ligand binding. However, Hudson et al. is not relied upon for the length of peptide-ligands or for the negative impact of washing. Hudson et al. teach removal of non-binding ligands. When ligands have a fast off-rate separation still occurs by removing solution and washing is not required. The surface-tethered peptide ligands are not related to the removal of signal upon washing. The Powers et al. does not specify the use of ligands with fast off-rates nor is there evidence to suggest ligands with fast off-rates are used, therefore it would be obvious to include washing in the method of Powers et al.

Regarding Applicant's argument that there is a difference in why washing is used between Hudson et al. and the instant specification. Applicant argues that Hudson et al. teaches washing for removal of excess target and other molecules, and the instant application teaches physical separation and washing to remove non-binding components of the solution. However, the other molecules removed by Hudson et al. encompasses the non-binding components of the solution as taught by the instant specification. Furthermore, the differences in washing methods are not recited in the instant claims and are therefore not relevant.

Applicant argues that Hudson et al. requires incubation for 2 hours and the instant specification requires less than 15 minutes, which is moot because such a limitation is not recited in the instant claims.

Applicant further argues that Powers et al. does not teach a linker being covalently tethered to a substrate surface via a tether having a length of at least 6 angstroms, nor the separation of the bound analyte from non-binding components. However, as stated above, Powers et al. is not relied upon for a separation step. The same tethers are taught in the instant specification and Powers et al. Therefore, the tethers taught by Powers et al. are at least 6 angstroms as taught by the instant specification, and a teaching of the reason for the importance of the tether size is not required.

Applicant argues that intrinsic fluorescence of Powers et al. is ratio fluorescence, which is not recited by the instant claim, and is therefore irrelevant. Furthermore, Applicant argues that the full range of detected emission peak is not taught by Powers et al. However, since a detection range is recited in the instant claims, any detected emission peak falling within 300-400 nm reads on the recited range.

Applicant argues that Hudson et al. counsels against using surface-tethered peptide ligands as close to the surface as the present application teaches due to artifacts introduced by surface effects. However, Hudson et al. is merely relied upon for washing and separation, and as described in the office action dated 23 December 2004, Powers et al. is relied upon for the length of surface-tethered peptide ligands.